

**Smithson Jr., Robert (DEQ)**

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**From:** Chris Schrantz [cschrantz@chesapeakeairport.com]  
**Sent:** Friday, July 11, 2014 12:05 PM  
**To:** Smithson Jr., Robert (DEQ)  
**Cc:** 'Earl Hollowell'; 'Mary Cover'; 'Steve Peterson'  
**Subject:** RE: Airport VPDES Reissuance Application- Additional Information Needed  
**Attachments:** 2213-1401 Form 2F Additional Information.pdf

Mr. Smithson,

Please find included with this email a pdf copy of the additional information you requested for Form 2F of the VPDES Permit Application. This document contains information regarding the contributing pollutant sources to each of the noted outfalls shown in our previously submitted outfall map. This document also notes that no de-icing materials are used in any of the areas that drain to these outfalls. The Chesapeake Regional Airport does not currently provide de-icing services nor do we store any type of de-icing chemicals on the airport.

I trust this information will suffice and will allow our permit renewal process to continue. Thank you for your assistance and please do not hesitate to let me know if you have any questions.

Regards,

Chris Schrantz  
Airport Manager  
Chesapeake Regional Airport  
2800 Airport DR  
Chesapeake, VA 23323

757-432-8110 (W)  
757-432-8410 (F)



CHESAPEAKE REGIONAL AIRPORT  
REISSUANCE OF VPDES PERMIT  
VPDES PERMIT NO. VA0068209

APPLICATION FORM 2F – SUPPLEMENTAL INFORMATION

POTENTIAL POLLUTION SOURCES

Outfall 001

The area that drains to Outfall 001 has one primary source of pollution which is the airports current water treatment plant. No other developed area drains to this point.

No de-icing chemicals are used in this area.

Outfall 002

Outfall 002 is the primary outfall for the airport's southern developed terminal area. In this area are 10 t-hangar/corporate hangar buildings that store approximately 100 aircraft. There is also an asphalt apron that holds approximately 20 aircraft by means of rope tie-downs as well as the airport maintenance building. Potential pollutant sources from these facilities include leakage of oil/grease/fuel from parked aircraft, runoff from paved surfaces and minimal erosion from the existing storm water management facility.

No de-icing chemicals are used in this area.

Outfall 004 (non-industrial)

Normal runoff from grassed/forested areas is anticipated in this location. No de-icing chemicals are used in this area.

Outfall 005

Outfall 005 is the primary outfall for the main terminal area and the existing fuel farm. Drainage to this location also includes the existing aircraft tie-down ramp which holds approximately 36 aircraft. Potential pollutant sources from these areas include leakage of oil/grease/fuel from parked aircraft, fuel from the existing fuel farm and oil/grease from the existing oil/water separators.

No de-icing chemicals are used in this area.

**Smithson Jr., Robert (DEQ)**

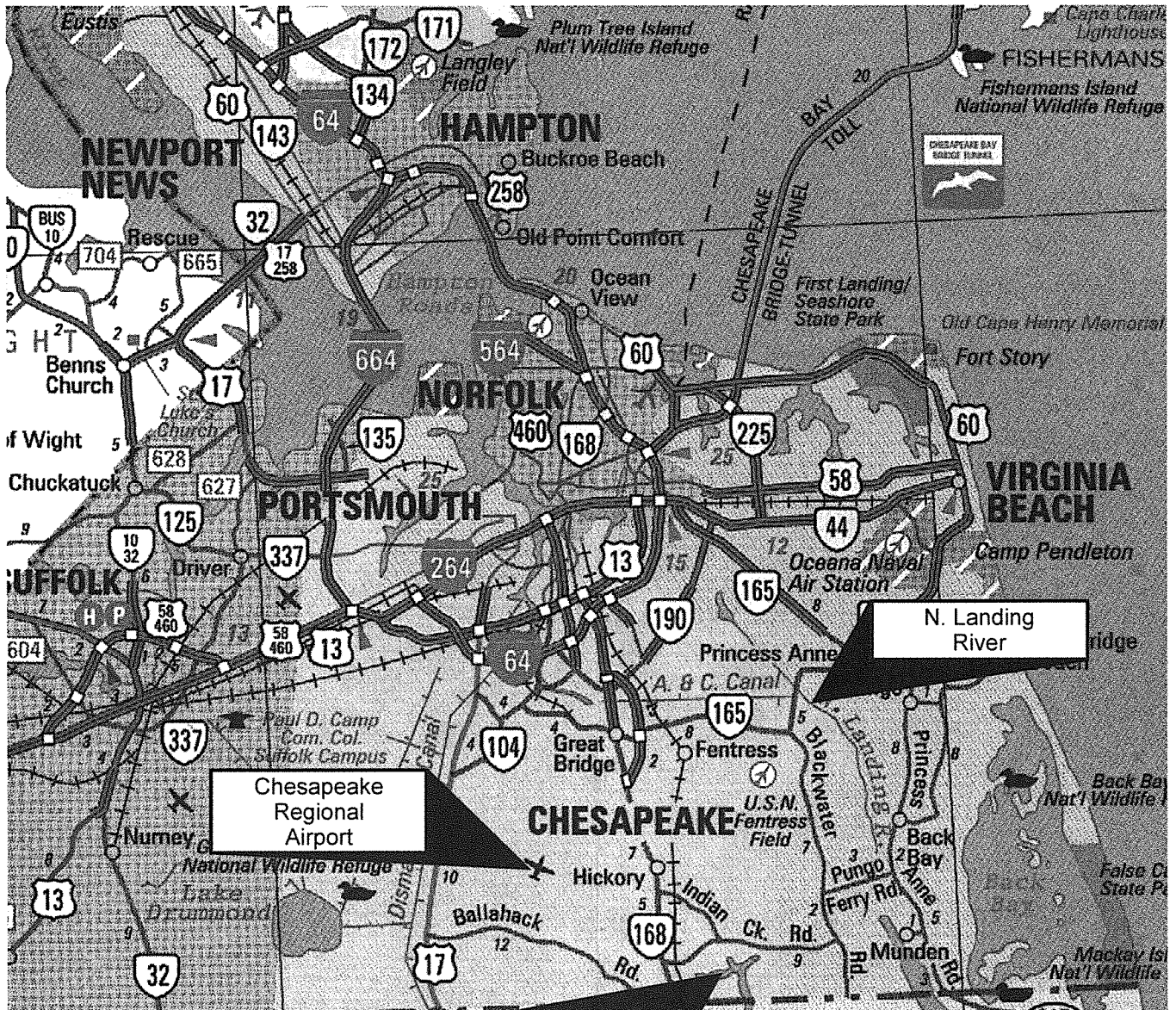
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**From:** Smithson Jr., Robert (DEQ)  
**Sent:** Thursday, June 05, 2014 10:11 AM  
**To:** 'cschrantz@chesapeakeairport.com'  
**Subject:** Airport VPDES Reissuance Application- Additional Information Needed

Mr. Schrantz:

The application overall looks good. Just need some additional information to deem it complete. The 2F application does not address what contribution sources go to each outfall. Please list all contribution pollutant streams that go to each outfall. Also we would like confirmation that de-icing practices are not performed at this facility.

As I mentioned in previous April 7, 2014 e-mail correspondence, this permit reissuance will contain a 4-yr schedule to meet phosphorous loadings (Northwest River watershed TMDL) which will most probably require a treatment plant upgrade. I mention this again so that you and the Board are not financially blindsided by this requirement.

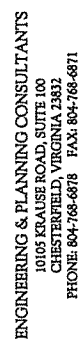


Chesapeake  
Regional  
Airport

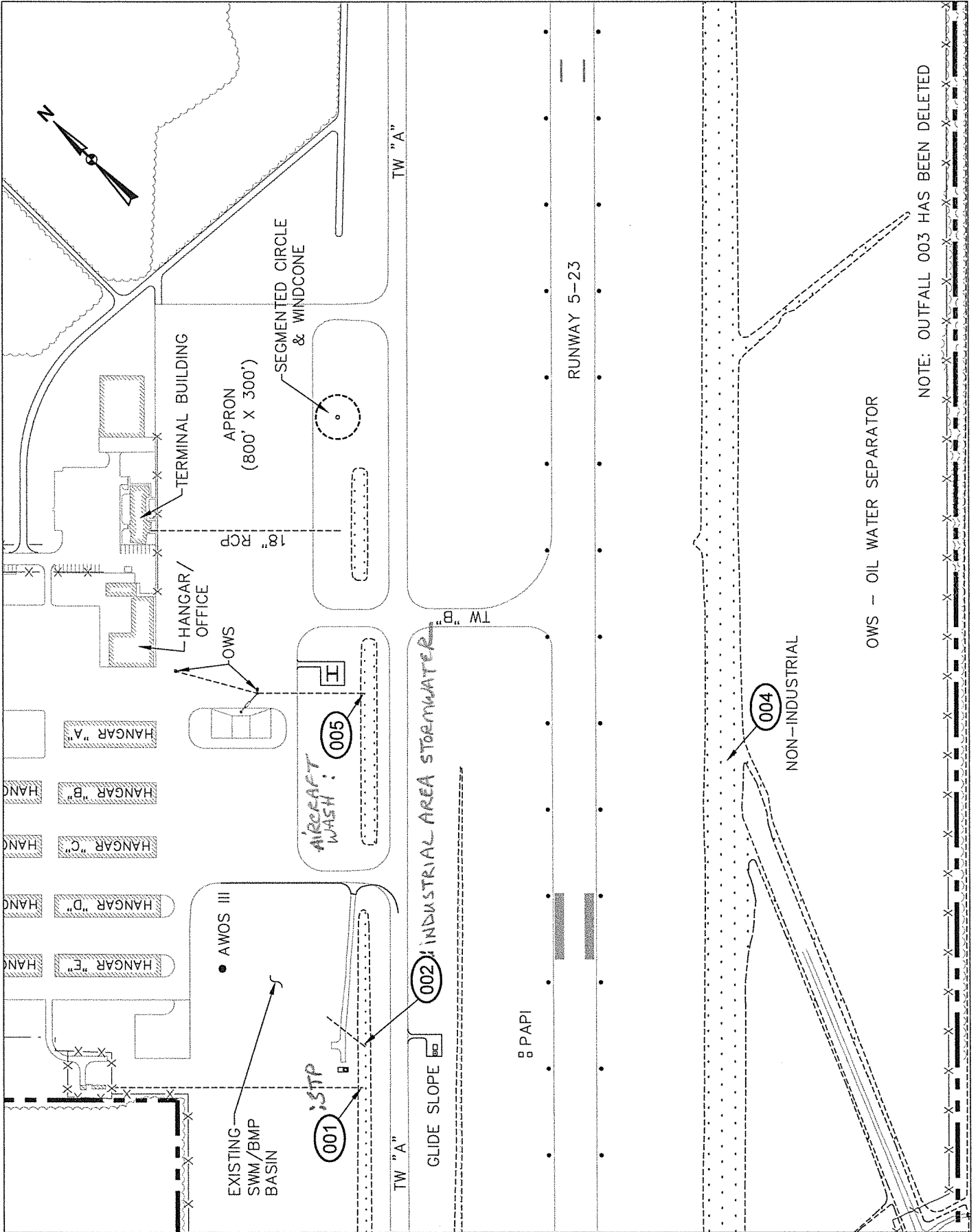
N. Landing  
River

Northwest  
River





# CHESAPEAKE REGIONAL AIRPORT



## Gantt, Clyde (DEQ)

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**From:** Gantt, Clyde (DEQ)  
**Sent:** Thursday, December 19, 2013 9:38 AM  
**To:** 'cschrantz@chesapeakeairport.com'  
**Subject:** Outfalls  
**Attachments:** Airport Map.pdf

Mr. Schrantz,

When the application for the new permit is submitted, it should show some changes to the outfalls. Please reference the attached map.

Outfall 001 will remain the wastewater treatment plant. The outfall location on the map should be the actual sample location.

Outfall 005 will remain the aircraft wash. The placement on the map should be the actual sample location.

Outfall 002 will be for the "industrial area" stormwater. The location will be in the main drainage ditch, downstream or east of where the pipe marked "002" on the map enters the ditch.

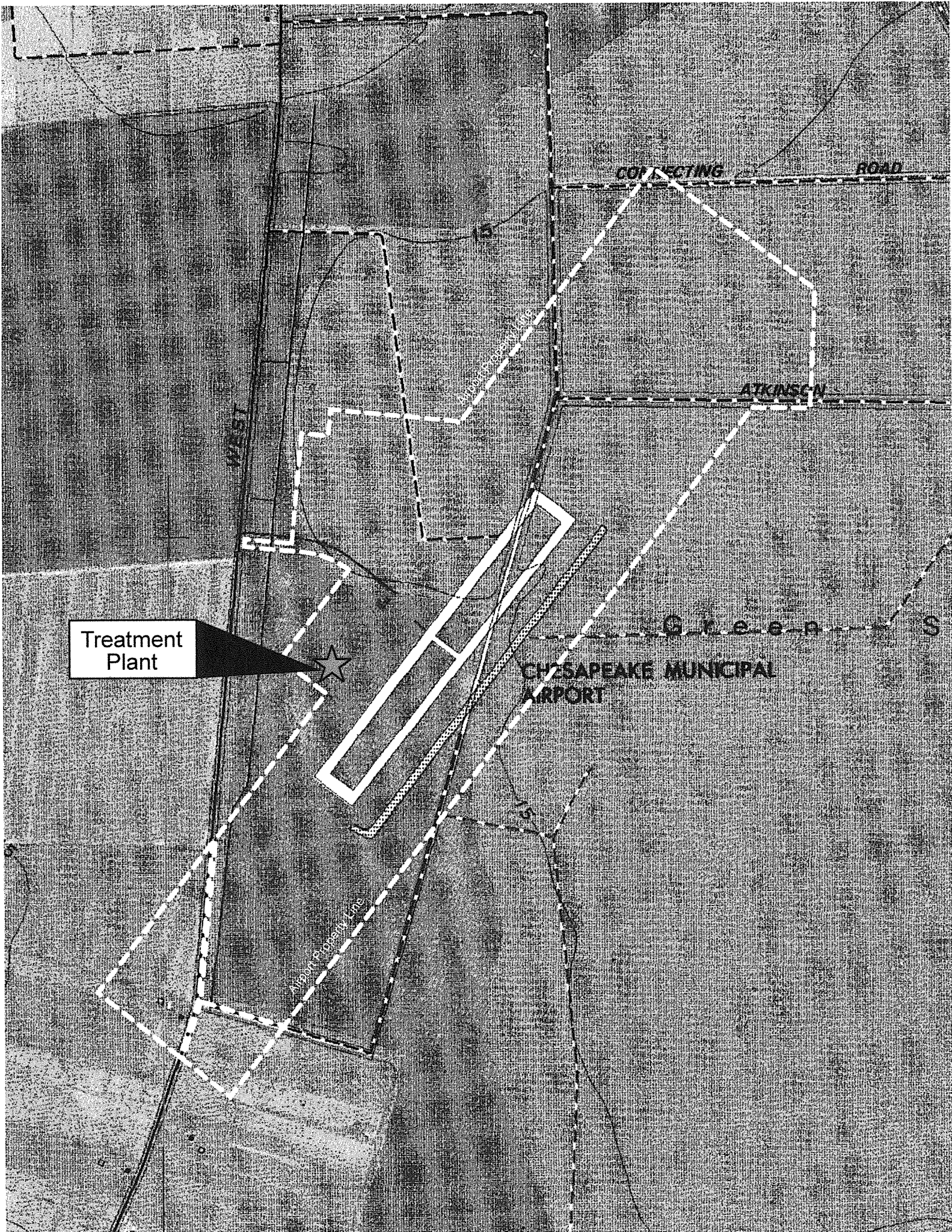
Outfalls 003 and 004 should be noted on the map. However, they should be listed as "non-industrial" outfalls.

*↳ T-HANGER & APRON AREA*

Contact me if you have any questions.

Clyde Gantt  
VPDES/VPA Inspector  
757-518-2114

*Tim B L  
stormwater condition*



Treatment  
Plant

CONNECTING ROAD

ATKINSON

Green S

CHESAPEAKE MUNICIPAL  
AIRPORT

WEST

Alphon Property Line

15



FACILITY NAME AND PERMIT NUMBER:

Chesapeake Regional Airport VA00068209

Form Approved 1/14/99  
OMB Number 2040-0086

FORM  
2A  
NPDES

## NPDES FORM 2A APPLICATION OVERVIEW

### APPLICATION OVERVIEW

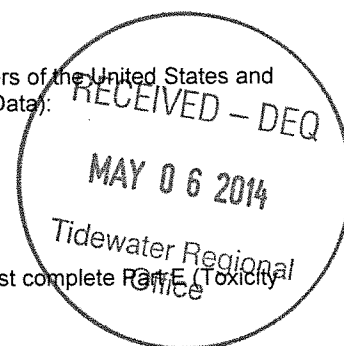
Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

#### BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow  $\geq$  0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

#### SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
  - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  - 2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).



**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

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## BASIC APPLICATION INFORMATION

### PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

#### A.1. Facility Information.

Facility name Chesapeake Regional Airport

Mailing Address 2800 Airport Drive,  
Chesapeake, VA 23323

Contact person Chris Schrantz

Title Airport Manager

Telephone number (757) 432-8110

Facility Address 2800 Airport Drive  
(not P.O. Box) Chesapeake, VA 23323

#### A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Chesapeake Airport Authority

Mailing Address 2800 Airport Drive  
Chesapeake, VA 23323

Contact person Chris Shrantz

Title Airport Manager

Telephone number (757) 432-8110

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant

#### A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA 0068209

PSD \_\_\_\_\_

UIC \_\_\_\_\_

Other \_\_\_\_\_

RCRA \_\_\_\_\_

Other \_\_\_\_\_

#### A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Chesapeake Regional</u>	<u>50</u>	<u>Separate</u>	<u>Chesapeake Airport</u>
<u>Airport</u>	_____	_____	<u>Authority</u>
_____	_____	_____	_____

Total population served 50

**A.5. Indian Country.**

- a. Is the treatment works located in Indian Country?

\_\_\_\_\_ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

\_\_\_\_\_ Yes ☒ No

**A.6. Flow.** Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate 0.01 mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
b. Annual average daily flow rate	<u>.0017</u>	<u>.0026</u>	<u>.0023</u> mgd
c. Maximum daily flow rate	<u>.0067</u>	<u>.0119</u>	<u>.0085</u> mgd

**A.7. Collection System.** Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %  
\_\_\_\_\_ Combined storm and sanitary sewer \_\_\_\_\_ %

**A.8. Discharges and Other Disposal Methods.**

- a. Does the treatment works discharge effluent to waters of the U.S.? ☒ Yes \_\_\_\_\_ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent \_\_\_\_\_  
ii. Discharges of untreated or partially treated effluent \_\_\_\_\_  
iii. Combined sewer overflow points \_\_\_\_\_  
iv. Constructed emergency overflows (prior to the headworks) \_\_\_\_\_  
v. Other \_\_\_\_\_

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? \_\_\_\_\_ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: N/A

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- c. Does the treatment works land-apply treated wastewater? \_\_\_\_\_ Yes ☒ No

If yes, provide the following for each land application site:

Location: N/A

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? \_\_\_\_\_ Yes ☒ No

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: N/A

Mailing Address: \_\_\_\_\_

Contact person: N/A

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

For each treatment works that receives this discharge, provide the following:

Name: N/A

Mailing Address: \_\_\_\_\_

Contact person: N/A

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

If known, provide the NPDES permit number of the treatment works that receives this discharge. \_\_\_\_\_

Provide the average daily flow rate from the treatment works into the receiving facility. \_\_\_\_\_ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? \_\_\_\_\_ Yes ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?



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**WASTEWATER DISCHARGES:**

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

**A.9. Description of Outfall.**

- a. Outfall number 001
- b. Location Chesapeake 23323  
(City or town, if applicable) (Zip Code)  
United States of America Virginia  
(County) (State)  
36-39-32 76-19-25  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) N/A ft.
- d. Depth below surface (if applicable) N/A ft.
- e. Average daily flow rate .0023 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? Yes ☒ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: \_\_\_\_\_
- Average duration of each discharge: \_\_\_\_\_
- Average flow per discharge: \_\_\_\_\_ mgd
- Months in which discharge occurs: \_\_\_\_\_
- g. Is outfall equipped with a diffuser? Yes ☒ No

**A.10. Description of Receiving Waters.**

- a. Name of receiving water Un-named tributary to Twelve Foot Ditch
- b. Name of watershed (if known) Unknown
- United States Soil Conservation Service 14-digit watershed code (if known): Unknown
- c. Name of State Management/River Basin (if known): Unknown
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): Unknown
- d. Critical low flow of receiving stream (if applicable):  
acute N/A cfs chronic N/A cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): N/A mg/l of CaCO<sub>3</sub>

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**A.11. Description of Treatment.**

a. What levels of treatment are provided? Check all that apply.

☐ Primary

☒ Secondary

☐ Advanced

☐ Other. Describe: \_\_\_\_\_

b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal 20mg/L 92% %

Design SS removal 20mg/L 92% %

Design P removal N/A %

Design N removal N/A %

Other                      N/A %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒ Yes ☐ No

d. Does the treatment plant have post aeration?

☐ Yes ☒ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.6	s.u.			
pH (Maximum)	8.0	s.u.			
Flow Rate	.0085	mgd	.0022	mgd	3
Temperature (Winter)					
Temperature (Summer)					

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

**CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.**

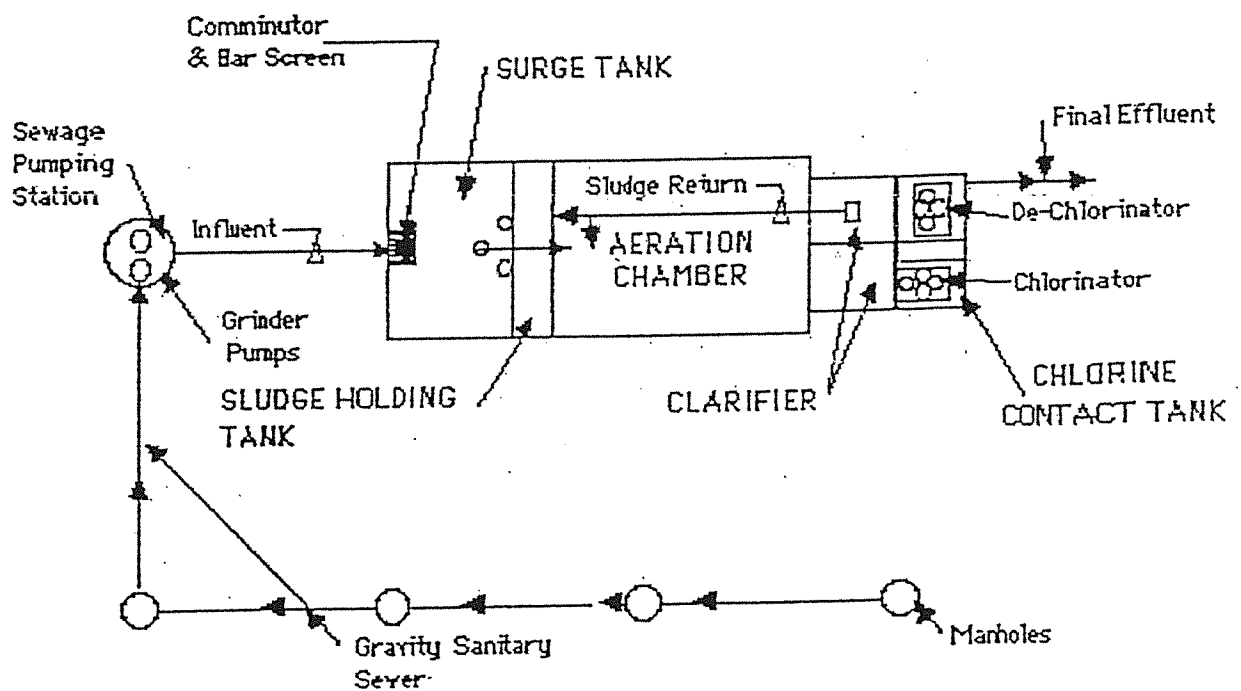
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	8.46	mg/L	5.27	mg/L	3	5210 B-2011	
	CBOD-5							
FECAL COLIFORM		114	N/cmL	22	N/cmL	3	9222 D-1997	
TOTAL SUSPENDED SOLIDS (TSS)		14.0	mg/L	11.0	mg/L	3	2540 D-2011	

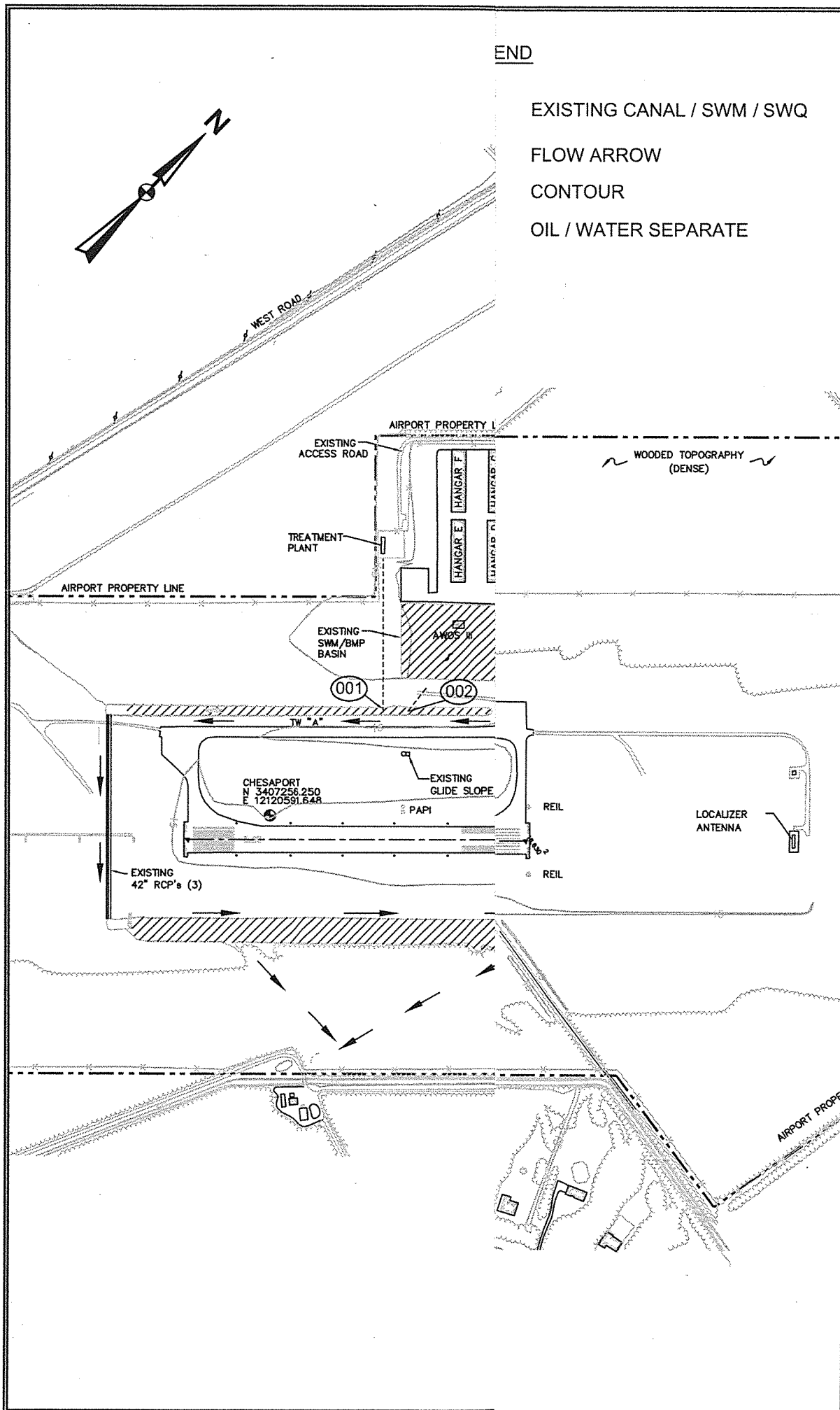
**END OF PART A.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## 2.2 Flow Diagram:

The following is a flow diagram of the treatment plant.





Chesapeake Regional Airport

Scale : 1"=500'

VA0068209

**TALBERT & BRIGHT**

ENGINEERING & PLANNING CONSULTANTS

10105 KRAUSE ROAD, SUITE 100

CHESTERFIELD, VIRGINIA 23832

PHONE: 804-768-6878 FAX: 804-768-6871

END

EXISTING CANAL / SWM / SWQ

FLOW ARROW

CONTOUR

OIL / WATER SEPARATE

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## BASIC APPLICATION INFORMATION

### PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.  
\_\_\_\_\_ gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

N/A

**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

#### B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☒ No

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- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM / DD / YYYY	MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

N/A

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: \_\_\_\_\_  
\_\_\_\_\_

**B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).**

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: \_\_\_\_\_

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

**END OF PART B.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

FACILITY NAME AND PERMIT NUMBER:  
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## BASIC APPLICATION INFORMATION

### PART C. CERTIFICATION

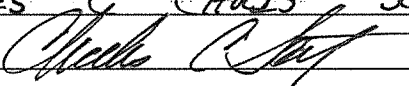
All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet      Supplemental Application Information packet:  
\_\_\_\_ Part D (Expanded Effluent Testing Data)  
\_\_\_\_ Part E (Toxicity Testing: Biomonitoring Data)  
\_\_\_\_ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)  
\_\_\_\_ Part G (Combined Sewer Systems)

### ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title CHARLES G "CHUCK" SCHIRANTZ, AIRPORT MANAGER  
Signature   
Telephone number 757-432-8110  
Date signed 5-1-14

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99  
OMB Number 2040-0086

Chesapeake Regional Airport VA00068209

**SUPPLEMENTAL APPLICATION INFORMATION****PART D. EXPANDED EFFLUENT TESTING DATA**

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

**Effluent Testing: 1.0 mgd and Pretreatment Treatment Works.** If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
<b>METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.</b>											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO <sub>3</sub> )											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											



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Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

N/A

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Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

## ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

## BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

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Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GH)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

N/A

## FACILITY NAME AND PERMIT NUMBER:

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Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM  
2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

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Chesapeake Regional Airport VA00068209

**SUPPLEMENTAL APPLICATION INFORMATION****PART E. TOXICITY TESTING DATA**

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

**E.1. Required Tests.**

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

\_\_\_\_ chronic      \_\_\_\_ acute

**E.2. Individual Test Data.** Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: \_\_\_\_\_ Test number: \_\_\_\_\_ Test number: \_\_\_\_\_

**a. Test information.**

Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

**b. Give toxicity test methods followed.**

Manual title			
Edition number and year of publication			
Page number(s)			

**c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.**

24-Hour composite			
Grab			

**d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)**

Before disinfection			
After disinfection			
After dechlorination			

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Test number: \_\_\_\_\_

Test number: \_\_\_\_\_

Test number: \_\_\_\_\_

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

N/A

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100%  
effluent

%

%

%

LC<sub>50</sub>

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC <sub>25</sub>	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

**E.3. Toxicity Reduction Evaluation.** Is the treatment works involved in a Toxicity Reduction Evaluation?

\_\_\_ Yes \_\_\_ No      If yes, describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**E.4. Summary of Submitted Biomonitoring Test Information.** If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: \_\_\_\_\_ (MM/DD/YYYY)

N/A

Summary of results: (see instructions)  
\_\_\_\_\_  
\_\_\_\_\_

**END OF PART E.**  
**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

## FACILITY NAME AND PERMIT NUMBER:

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

## GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

\_\_\_ Yes \_\_\_ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. \_\_\_\_\_

b. Number of CIUs. \_\_\_\_\_

## SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

N/A

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): \_\_\_\_\_

Raw material(s): \_\_\_\_\_

## F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd (\_\_\_ continuous or \_\_\_ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd (\_\_\_ continuous or \_\_\_ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits \_\_\_ Yes \_\_\_ No

b. Categorical pretreatment standards \_\_\_ Yes \_\_\_ No

If subject to categorical pretreatment standards, which category and subcategory?

\_\_\_\_\_



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**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No If yes, describe each episode.

\_\_\_\_\_  
\_\_\_\_\_

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☐ No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

N/A

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.) ☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

\_\_\_\_\_  
\_\_\_\_\_

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

\_\_\_\_\_  
\_\_\_\_\_

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous ☐ Intermittent If intermittent, describe discharge schedule.

\_\_\_\_\_

**END OF PART F.**  
**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

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## SUPPLEMENTAL APPLICATION INFORMATION

### PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

**G.1. System Map.** Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

**G.2. System Diagram.** Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

N/A

### CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

**G.3. Description of Outfall.**

- Outfall number \_\_\_\_\_
- Location  
(City or town, if applicable) \_\_\_\_\_ (Zip Code) \_\_\_\_\_  
(County) \_\_\_\_\_ (State) \_\_\_\_\_  
(Latitude) \_\_\_\_\_ (Longitude) \_\_\_\_\_
- Distance from shore (if applicable) \_\_\_\_\_ ft.
- Depth below surface (if applicable) \_\_\_\_\_ ft.
- Which of the following were monitored during the last year for this CSO?  
\_\_\_\_ Rainfall      \_\_\_\_ CSO pollutant concentrations      \_\_\_\_ CSO frequency  
\_\_\_\_ CSO flow volume      \_\_\_\_ Receiving water quality
- How many storm events were monitored during the last year? \_\_\_\_\_

**G.4. CSO Events.**

- Give the number of CSO events in the last year.  
\_\_\_\_\_ events (\_\_\_\_ actual or \_\_\_\_ approx.)
- Give the average duration per CSO event.  
\_\_\_\_\_ hours (\_\_\_\_ actual or \_\_\_\_ approx.)

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- c. Give the average volume per CSO event.

\_\_\_\_\_ million gallons (\_\_\_\_\_ actual or \_\_\_\_\_ approx.)

- d. Give the minimum rainfall that caused a CSO event in the last year.

\_\_\_\_\_ inches of rainfall

N/A

**G.5. Description of Receiving Waters.**

- a. Name of receiving water: \_\_\_\_\_

- b. Name of watershed/river/stream system: \_\_\_\_\_

United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_

- c. Name of State Management/River Basin: \_\_\_\_\_

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6. CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

\_\_\_\_\_  
\_\_\_\_\_

**END OF PART G.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

## VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Chesapeake Regional Airport Authority

*Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.*

2. **Is this facility located within city or town boundaries?** Yes ☒ No ☐

3. **Provide the tax map parcel number for the land where the discharge is located.** 07000000021

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 15 acres

5. **What is the design average effluent flow of this facility?** 0.01 MGD

**For industrial facilities, provide the max. 30-day average production level, include units:**

Unknown

**In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels?** Yes ☐ No ☒

If "Yes", please identify the other flow tiers (in MGD) or production levels:

N/A

*Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?*

6. **Nature of operations generating wastewater:**

Restrooms of private businesses and public use airport

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: \_\_\_\_\_

       % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☐ Continuous ☒ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

When waste is generated from the use of each facility

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

       Permanent stream, never dry

       Intermittent stream, usually flowing, sometimes dry

       Ephemeral stream, wet-weather flow, often dry

       Effluent-dependent stream, usually or always dry without effluent flow

       Lake or pond at or below the discharge point

x Other: Canal where flow is controlled by an outfall structure

9. **Approval Date(s):**

**O & M Manual** November 9, 2004 **Sludge/Solids Management Plan** November 9, 2004

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No ☒

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in Virginia Pilot in accordance with 9 VAC 25-32-140.A.

Agent/Department to be billed: Mr. Charles C. Schrantz

Owner: Chesapeake Regional Airport Authority

Agent/Department Address: 2800 Airport Drive

Chesapeake, VA 23323

Agent's Telephone No.: 757-432-8110

Authorizing Agent's E-mail Address cschrantz@chesapeakeairport.com

Printed Name: Charles C. Schrantz

Authorizing Agent – Signature: 

Date: 03/20/2014

VPA Permit No. VPA0068209

Facility Name: Chesapeake Regional Airport WWTP

Cc: (DEQ File ECM)

**VPDES/VPA Permit Billing Information Form  
for Annual Maintenance Fee**

**Facility Name:** Chesapeake Regional Airport

**Permit Number:** VA0068209

**Person / Organization  
to be billed:** Chesapeake Regional Airport Authority

**Billing Address:** 2800 Airport Drive

Chesapeake, VA 23323

**Billing Contact Name:** Chris Schrantz

**Title:** Airport Manager

**Phone Number:** 757-432-8110

**E-Mail Address:** cschrantz@chesapeakeairport.com

## VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

## SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? X Yes    No

Will this facility derive a material from sewage sludge?    Yes X No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land?    Yes X No

Will sewage sludge from this facility be applied to the land?    Yes X No

If you answered No to both questions above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?

N/A Yes N/A No

b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? N/A Yes N/A No

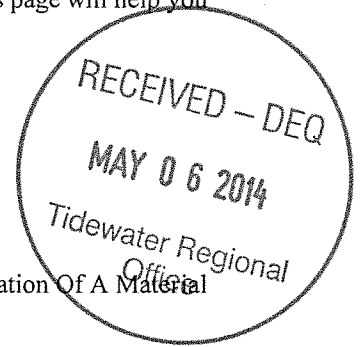
c. Will sewage sludge from this facility be sent to another facility for treatment or blending? N/A Yes N/A No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site?    Yes X No

If Yes, complete Section D (Surface Disposal).



**All applicants must complete this section.**

a. Facility name: Chesapeake Regional Airport

b. Contact person: Chris Schrantz  
Title: Airport Manager  
Phone: (757) 382-6175

c. Mailing address: 2800 Airport Drive  
Street or P.O. Box:  
City or Town: Chesapeake State: VA Zip: 23323

d. Facility location:  
Street or Route #: 2800 Airport Drive  
County:  
City or Town: Chesapeake State: VA Zip: 23323

e. Is this facility a Class I sludge management facility? Yes X No

f. Facility design flow rate: 0.01 mgd

g. Total population served: 50

h. Indicate the type of facility:  
X Publicly owned treatment works (POTW)  
   Privately owned treatment works  
   Federally owned treatment works  
   Blending or treatment operation  
   Surface disposal site  
Other (describe):

a. Applicant name:

b. Mailing address:  
Street or P.O. Box:  
City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

c. Contact person:  
Title:  
Phone: (    ) \_\_\_\_\_

d. Is the applicant the owner or operator (or both) of this facility?  
\_\_\_\_X\_\_\_\_ owner                      \_\_\_\_X\_\_\_\_ operator

e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)  
\_\_\_\_X\_\_\_\_ facility                      \_\_\_\_\_ applicant

a. Facility's VPDES permit number (if applicable): VA0068209

b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

<u>Permit Number:</u>	<u>Type of Permit:</u>
<u>N/A</u>	
<u>N/A</u>	

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5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
  - Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? X Yes    No  
If yes, provide the following for each contractor (attach additional pages if necessary).  
Name: Z Artis Septic Tank Cleaning  
Mailing address: 2756 Battlefield Boulevard South  
Street or P.O. Box:  
City or Town: Chesapeake State: VA Zip: 23322  
Phone: (757) 421-4981  
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:  
SH-038-I  
If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	Not Available			
Cadmium	Not Available			
Chromium	Not Available			
Copper	Not Available			
Lead	Not Available			
Mercury	Not Available			
Molybdenum	Not Available			
Nickel	Not Available			
Selenium	Not Available			
Zinc	Not Available			

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:
- X   Section A (General Information)  
  X   Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)  
   Section C (Land Application of Bulk Sewage Sludge)  
   Section D (Surface Disposal)

FACILITY NAME: Chesapeake Regional Airport

VPDES PERMIT NUMBER: VA0068209

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Chris Schrantz, Airport Manager

Signature  Date Signed 5-1-14

Telephone number (757) 432-8110

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION  
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.  
Total dry metric tons per 365-day period generated at your facility: Unknown dry metric tons
2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
  - a. Facility name: N/A
  - b. Contact Person:  
Title:  
Phone ( )
  - c. Mailing address:  
Street or P.O. Box:  
City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
  - d. Facility Address:  
(not P.O. Box)
  - e. Total dry metric tons per 365-day period received from this facility: \_\_\_\_\_ dry metric tons
  - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
3. Treatment Provided at Your Facility.
  - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?  
Class A Class B X Neither or unknown
  - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:
  - c. Which vector attraction reduction option is met for the sewage sludge at your facility?  
Option 1 (Minimum 38 percent reduction in volatile solids)  
Option 2 (Anaerobic process, with bench-scale demonstration)  
Option 3 (Aerobic process, with bench-scale demonstration)  
Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
Option 5 (Aerobic processes plus raised temperature)  
Option 6 (Raise pH to 12 and retain at 11.5)  
Option 7 (75 percent solids with no unstabilized solids)  
Option 8 (90 percent solids with unstabilized solids)  
X None or unknown
  - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:
  - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above:
4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).  
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
  - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:  
\_\_\_\_\_ dry metric tons
  - b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?  
Yes X No

## 5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: N/A dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

## 6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name: Nansemond Treatment Plant
- b. Facility contact: Hampton Roads Sanitation District (HRSD)  
Title:  
Phone: (757) (757) 483-0034
- c. Mailing address: 6909 Armstead Road  
Street or P.O. Box:  
City or Town: Suffolk State: VA Zip: 23435
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: \_\_\_\_\_ dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:  
Permit Number: VA0081299 Type of Permit: VPDES
- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? Yes X No  
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?  
Class A Class B X Neither or unknown  
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:
- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? Yes X No  
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?  
Option 1 (Minimum 38 percent reduction in volatile solids)  
Option 2 (Anaerobic process, with bench-scale demonstration)  
Option 3 (Aerobic process, with bench-scale demonstration)  
Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
Option 5 (Aerobic processes plus raised temperature)  
Option 6 (Raise pH to 12 and retain at 11.5)  
Option 7 (75 percent solids with no unstabilized solids)  
Option 8 (90 percent solids with unstabilized solids)  
X None unknown  
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:
- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?  
Yes X No  
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
- i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

- j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land?    Yes   X   No  
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes?   X   Yes    No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.  
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported.

## 7. Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- N/A
- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:            dry metric tons
- b. Do you identify all land application sites in Section C of this application?    Yes    No  
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia?    Yes    No  
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

## 8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

- N/A
- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites:            dry metric tons
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?  
   Yes    No  
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number:
- d. Contact person:  
Title:  
Phone: (    )  
Contact is:    Site Owner    Site operator
- e. Mailing address.  
Street or P.O. Box:  
City or Town:                                    State:            Zip:
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site:            dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:  
Permit Number:                                    Type of Permit:

## 9. Incineration.

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- N/A
- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator:                                    dry metric tons

- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?

     Yes      No

If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.

- c. Incinerator name or number:

- d. Contact person:

Title:

Phone: (    )

Contact is:      Incinerator Owner      Incinerator Operator

- e. Mailing address.

Street or P.O. Box:

City or Town:                                  State:            Zip:

- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator:                                  dry metric tons

- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:

Permit Number:

Type of Permit:

10. Disposal in a Municipal Solid Waste Landfill.

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

- a. Landfill name:

- b. Contact person:

Title:

Phone: (    )

Contact is:      Landfill Owner      Landfill Operator

- c. Mailing address.

Street or P.O. Box:

City or Town:                                  State:            Zip:

- d. Landfill location.

Street or Route #:

County:

City or Town:                                  State:            Zip:

- e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:                                  dry metric tons

- f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:

Type of Permit:

- g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?

     Yes      No

- h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.?      Yes      No

- i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered?      Yes      No

Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported.

N/A

## **SLUDGE DISPOSAL PLAN FOR THE CHESAPEAKE REGIONAL AIRPORT SEWAGE TREATMENT PLANT**

Aerated Sludge Holding Tank:

Volume = 165 CF or 1230 gallons

Aeration is by diffused aeration providing 75 cfm.

### **QUANTITY & QUALITY OF SLUDGE**

Based on the treatment scheme such as, the extended aeration modification of the activated sludge process, the approximate pounds of sludge to be wasted to the aerated sludge holding tank each day is 1 cubic feet or approximately 7.5 gallons. Assuming 20-25% reduction of solids and maximum decanting of the supernatant before sludge withdrawal, 1000 gallons of sludge must be pumped each 167 days.

If sludge monitoring/analysis is not performed to classify the sludge, it will be assumed that the sludge will meet the requirements of a Class B sludge as defined in the Commonwealth of Virginia Sewerage Regulations, Section 25.07.05 because it is not totally stabilized.

If not dewatering facilities are available at this plant, it is assumed that the sludge solids content cannot meet the requirements for a dried or partially dried sludge.

### **SLUDGE REMOVAL**

With a sludge holding tank capacity of 1230 gallons, the holding tank has a capacity of 205 days. Therefore, the sludge is to be dumped from the tank 1 time/year. Visual inspection by the operator will determine when pumping must be accomplished. The Health Department and the State Water Control Board will note the exact day of the sludge pumping in plant records for examination if desired.

### **SLUDGE HAULING**

A reputable septic tank service company to be determined at the time of pumping will accomplish sludge pumping and hauling. Companies that will be considered based on availability today are:

- 1) Z. Artis
- 2) Duck's Pumping Service

It is explicitly understood that Chesapeake Regional Airport will have the final responsibility to insure the sludge is disposed correctly.

The hauling contractor will haul the sludge in a non-spill; watertight tank mounted on a truck normally used for such operation. He will haul it to HRSD-Nanesmond River Plant

owned by Hampton Roads Sanitation District whereby it will be delivered to the treatment or disposal site.

#### TRANSPORTATION ROUTE & TIMES

Start out going north on West Road towards Woodward Way. Turn right onto Drumcastle Lane. Turn left onto Scenic Parkway. Turn right onto Dominion Blvd. S/US-17N/VA-104. Turn left onto Cedar Road/VA-165. Continue to follow VA-165. VA-165 becomes George Washington Highway S/ US-17 Bus N. Turn right onto George Washington Highway N/US-17 Bus N. Continue to follow George Washington Highway N. Merge onto I-64 E toward I-664/Suffolk/Hampton. Keep left to take I-664 N via Exit 299B toward US-13/US-58/US-460/Suffolk/Newport News/Richmond. Take the exit toward Inspection Station. Turn slight right. Turn left. Turn right onto Armstead Road. Arrive at 6909 Armstead Road at the end of the road.

The approximate distance each way is 23 miles. To prevent nuisance to the populace along the hauling routes, the time of day the contractor will be allowed to haul will be between 9:30-11:30 am and 2:00-4:00 pm Monday through Friday.

#### SLUDGE TREATMENT

After reaching HRSD the hauling contractor will pay the set fee for sludge delivered. The contractor will be responsible for meeting all requirements placed on him which includes:

- 1) Checking and maintaining the proper pH before dumping of approximately 7.0.
- 2) Cleanup of any spillage during delivery or performing any other cleanup operations as deemed necessary by HRSD due to the delivery of the sludge.

After delivery of the sludge, HRSD will be solely responsible for final disposal of our sludge. The hauling contractor will report to us the quantity of sludge delivered, the time of day, and the exact method of disposal. We shall, in turn, note this on the regular monthly operating report.

#### HAULING CONTRACTOR PROPOSAL

To make any prospective sludge hauling contractor aware of the content of the sludge disposal plan and to aid him in submitting a bid for the sludge hauling, the shall be given a copy of this sludge disposal plan bearing the approval of the State Health Department and the state Water Control Board.



## SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:

The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or

The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or

You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).

Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1. Identification of Land Application Site.

a. Site name or number:

b. Site location (Complete i and ii)

i. Street or Route#:

County:

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

ii. Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Method of latitude/longitude determination

\_\_\_\_\_ USGS map \_\_\_\_\_ Filed survey \_\_\_\_\_ Other

c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

2. Owner Information.

a. Are you the owner of this land application site? ☐ Yes ☐ No

b. If no, provide the following information about the owner:

Name:

Street or P.O. Box:

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: ( )

3. Applier Information:

a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? ☐ Yes ☐ No

b. If no, provide the following information for the person who applies the sewage sludge:

Name:

Street or P.O. Box:

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: ( )

c. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person who applies sewage sludge to this land application site:

Permit Number:

Type of Permit:

\_\_\_\_\_  
\_\_\_\_\_

4. Site Type. Identify the type of land application site from among the following:

☐ Agricultural land

☐ Reclamation site

☐ Forest

☐ Public contact site

☐ Other. Describe

5. Vector Attraction Reduction.

Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?

☐ Yes ☐ No If yes, answer a and b.

a. Indicate which vector attraction reduction option is met:

☐ Option 9 (Injection below land surface)

☐ Option 10 (Incorporation into soil within 6 hours)

b. Describe, on this form or on another sheet of paper, any treatment processes used at the land application site to reduce the vector attraction properties of sewage sludge:

## 6. Cumulative Loadings and Remaining Allotments.

(Complete Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) - see instructions.)

- a. Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993? Yes No

If no, sewage sludge subject to the CPLRs may not be applied to this site.

If yes, provide the following information:

Permitting authority:

Contact person:

Phone: ( )

- b. Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993? Yes No If no, skip the rest of Question 6. If yes, answer questions c - e.

- c. Site size, in hectares: \_\_\_\_\_ (one hectare = 2.471 acres)

- d. Provide the following information for every facility other than yours that is sending or has sent sewage sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

Facility name:

Facility contact:

Title:

Phone: ( )

Mailing address:

Street or P.O. Box:

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

- e. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	<u>Cumulative loading</u>	<u>Allotment remaining</u>
Arsenic	_____	_____
Cadmium	_____	_____
Copper	_____	_____
Lead	_____	_____
Mercury	_____	_____
Nickel	_____	_____
Selenium	_____	_____
Zinc	_____	_____

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

## 7. Sludge Characterization. Use the table below or a separate attachment, provide at least one analysis for each parameter.

PCBs (mg/kg)  
pH (S. U.)  
Percent Solids (%)  
Ammonium Nitrogen (mg/kg)  
Nitrate Nitrogen (mg/kg)  
Total Kjeldahl Nitrogen (mg/kg)  
Total Phosphorus (mg/kg)  
Total Potassium (mg/kg)  
Alkalinity as CaCO<sub>3</sub> (mg/kg)

\* Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent CaCO<sub>3</sub>.

## 8. Storage Requirements.

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

- a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.

- 1) Water wells, abandoned or operating  
2) Surface waters  
3) Springs  
4) Public water supply(s)  
5) Sinkholes  
6) Underground and/or surface mines  
7) Mine pool (or other) surface water discharge points  
8) Mining spoil piles and mine dumps  
9) Quarry(s)  
10) Sand and gravel pits  
11) Gas and oil wells  
12) Diversion ditch(s)  
13) Agricultural drainage ditch(s)  
14) Occupied dwellings, including industrial and commercial establishments  
15) Landfills or dumps  
16) Other unlined impoundments  
17) Septic tanks and drainfields  
18) Injection wells  
19) Rock outcrops

- b. A topographic map of sufficient detail to clearly show the following information:

- 1) Maximum and minimum percent slopes  
2) Depressions on the site that may collect water  
3) Drainageways that may attribute to rainfall run-on to or runoff from this site  
4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding

- c. Data and specifications for the storage facility lining material.

- d. Plan and cross-sectional views of the storage facility.

- e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.

9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.

10. Landowner Agreement Forms. Provide a properly completed **Land Application Agreement – Biosolids** Form and necessary attachments (attached at end of VPDES Sewage Sludge Permit Application Form) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.

11. Ground Water Monitoring.

Are any ground water monitoring data available for this land application site? ☐ Yes ☐ No

If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. Land Application Site Information.

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

- N/A
- a. Provide a general location map for each county which clearly indicates the location of all the land application sites.
  - b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.
  - c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U. S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service  
Virginia Field Office  
6669 Short Lane  
Gloucester, VA 23061  
TEL: (804)693-6694

Provide a copy of the notification letter with this application form.

- d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)  
Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.
  - 1) Soil symbol
  - 2) Soil series, textural phase and slope range
  - 3) Depth to seasonal high water table
  - 4) Depth to bedrock
  - 5) Estimated soil productivity group (for the proposed crop rotation)

**Item e - h are required for sites receiving frequent application of sewage sludge**

- e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:
  - 1). Soil symbol
  - 2). Soil series, textural phase and slope range
  - 3). Depth to seasonal high water table
  - 4). Depth to bedrock
  - 5). Estimated soil productivity group (for the proposed crop rotation)

- f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.

Soil Organic Matter (%)  
Soil pH (std. units)  
Cation Exchange Capacity (meq/100g)  
Total Nitrogen (ppm)  
Organic Nitrogen (ppm)  
Ammonia Nitrogen (ppm)  
Nitrate Nitrogen (ppm)  
Available Phosphorus (ppm)  
Exchangeable Potassium (mg/100g)  
Exchangeable Sodium (mg/100g)  
Exchangeable Calcium (mg/100g)  
Exchangeable Magnesium (mg/100g)  
Arsenic (ppm)  
Cadmium (ppm)  
Copper (ppm)  
Lead (ppm)  
Mercury (ppm)  
Molybdenum (ppm)  
Nickel (ppm)  
Selenium (ppm)  
Zinc (ppm)  
Manganese (ppm)  
Particle Size Analysis or  
USDA Textural Estimate (%)

N/A

- g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.
- h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

## SECTION D. SURFACE DISPOSAL

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

## 1. Information on Active Sewage Sludge Units.

- a. Unit name or number: \_\_\_\_\_
- b. Unit location
- i. Street or Route#: \_\_\_\_\_  
County: \_\_\_\_\_  
City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- ii. Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
Method of latitude/longitude determination  
\_\_\_\_\_ USGS map \_\_\_\_\_ Filed survey \_\_\_\_\_ Other \_\_\_\_\_
- c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
- d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period: \_\_\_\_\_ dry metric tons.
- e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit: \_\_\_\_\_ dry metric tons.
- f. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec? \_\_\_ Yes \_\_\_ No If yes, describe the liner or attach a description.
- g. Does the active sewage sludge unit have a leachate collection system? \_\_\_ Yes \_\_\_ No  
If yes, describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:
- h. If you answered no to either f or g, answer the following:  
Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? \_\_\_ Yes \_\_\_ No If yes, provide the actual distance in meters: \_\_\_\_\_
- i. Remaining capacity of active sewage sludge unit, in dry metric tons: \_\_\_\_\_ dry metric tons  
Anticipated closure date for active sewage sludge unit, if known: \_\_\_\_\_ (MM/DD/YYYY)  
Provide with this application a copy of any closure plan developed for this active sewage sludge unit.

## 2. Sewage Sludge from Other Facilities.

Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours? \_\_\_ Yes \_\_\_ No

If yes, provide the following information for each such facility, attach additional sheets as necessary.

- a. Facility name: \_\_\_\_\_
- b. Facility contact: \_\_\_\_\_  
Title: \_\_\_\_\_  
Phone: ( ) \_\_\_\_\_
- c. Mailing address. \_\_\_\_\_  
Street or P.O. Box: \_\_\_\_\_  
City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- d. List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the facility's sewage sludge management practices:  
Permit Number: \_\_\_\_\_ Type of Permit: \_\_\_\_\_  
\_\_\_\_\_
- e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?  
\_\_\_ Class A \_\_\_ Class B \_\_\_ Neither or unknown
- f. Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge: \_\_\_\_\_

- N/A
- g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?
- ☐ Option 1 (Minimum 38 percent reduction in volatile solids)
  - ☐ Option 2 (Anaerobic process, with bench-scale demonstration)
  - ☐ Option 3 (Aerobic process, with bench-scale demonstration)
  - ☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
  - ☐ Option 5 (Aerobic processes plus raised temperature)
  - ☐ Option 6 (Raise pH to 12 and retain at 11.5)
  - ☐ Option 7 (75 percent solids with no unstabilized solids)
  - ☐ Option 8 (90 percent solids with unstabilized solids)
  - ☐ None or unknown
- h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:
- i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:

## 3. Vector Attraction Reduction.

- a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?
- ☐ Option 9 (Injection below land surface)
  - ☐ Option 10 (Incorporation into soil within 6 hours)
  - ☐ Option 11 (Covering active sewage sludge unit daily)
- b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:

## 4. Ground Water Monitoring.

- a. Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit? ☐ Yes ☐ No
- If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
- b. Has a ground water monitoring program been prepared for this active sewage sludge unit?
- ☐ Yes ☐ No If yes, submit a copy of the ground water monitoring program with this application.
- c. Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated? ☐ Yes ☐ No
- If yes, submit a copy of the certification with this application.

## 5. Site-Specific Limits.

- Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?
- ☐ Yes ☐ No If yes, submit information to support the request for site-specific pollutant limits with this application.

# VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

## LAND APPLICATION AGREEMENT - BIOSOLIDS

N/A

A. This land application agreement is made on \_\_\_\_\_ between \_\_\_\_\_ referred to here as "Landowner", and \_\_\_\_\_, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

### Landowner:

The Landowner is the owner of record of the real property located in \_\_\_\_\_, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids			
<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.  
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply biosolids on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of biosolids for the purpose of determining compliance with regulatory requirements applicable to such application.

Landowner – Printed Name, Title

Signature

Mailing Address

### Permittee:

\_\_\_\_\_, the Permittee, agrees to apply biosolids on the Landowner's land in the manner authorized by the VPDES Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the documents assigning signatory authority to the person signing for landowner above. I will make a copy of this document available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Permittee – Authorized Representative  
Printed Name

Signature

Mailing Address



N/A

## LAND APPLICATION AGREEMENT - BIOSOLIDS

Permittee: \_\_\_\_\_ County or City: \_\_\_\_\_

Landowner: \_\_\_\_\_

**Landowner Site Management Requirements:**

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
  - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
  - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
  - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
  - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
  - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
  - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
  - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
  - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

\_\_\_\_\_  
Landowner's Signature\_\_\_\_\_  
Date

N/A

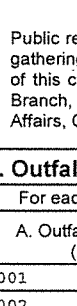
N/A

Landowner: \_\_\_\_\_

[illegible]

Page \_\_\_\_ of \_\_\_\_

Please print or type in the unshaded areas only.

FORM <b>2F</b> NPDES		<div>U.S. Environmental Protection Agency Washington, DC 20460</div> <div><b>Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity</b></div>			
<b>Paperwork Reduction Act Notice</b> Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.					
<b>I. Outfall Location</b>					
For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.					
A. Outfall Number (list)	B. Latitude	C. Longitude	D. Receiving Water (name)		
001	36 39 48.8	76 19 40.7	12 Foot Ditch 3.52 miles to the Northwest River		
002	36 39 44.8	76 19 33.9	12 Foot Ditch 3.52 miles to the Northwest River		
003 (deleted)					
004non-industrial	36 39 43.8	76 19 20.6	12 Foot Ditch 3.52 miles to the Northwest River		
005	36 39 43.6	76 19 20.7	12 Foot Ditch 3.52 miles to the Northwest River		
<b>II. Improvements</b>					
A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.					
1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
Not Applicable					
B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.					
<b>III. Site Drainage Map</b>					
Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.					

Continued from the Front

#### IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
	+/- 25 Acres	830.6 acres			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied

Existing 0.01 MGD Sewage Treatment Plant (VPDES Permit No. VA0068209) currently discharges to drain at outfall 001. The fuel handling area is protected by a catch basin with oil water separator.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge

Outfall Number	Treatment	List Codes from Table 2F-1
	Existing detention canal is controlled by the elevation of the outfall ditch	

#### V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall

Name and Official Title (type or print)	Signature	Date Signed
Chris Schrantz, Airport Manager		5-3-14

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

An instream testing program was instituted with monthly reports being sent to DEQ, Virginia Beach Regional Office in conjunction with VPDES Permit No. 0068209

#### VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

None

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.  
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

☐ Yes (list all such pollutants below)

☒ No (go to Section IX)

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such pollutants below)

☒ No (go to Section IX)

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Jennings Laboratories	1118 Cypress Avenue Virginia Beach, VA 23451	757-425-1498 (office) 757-422-9176 (fax)	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (Type Or Print)

Chris Schrantz / Airport Manager

B. Area Code and Phone No.

(757) 432-8110

C. Signature

D. Date Signed



Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
4-7-14	360	0.74	168 hours	unknown	unknown

7. Provide a description of the method of flow measurement or estimate.

undetermined





Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
4-7-14	360 minutes	0.74 inches	168 hours	unknown	unknown

7. Provide a description of the method of flow measurement or estimate.

Undetermined



Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
4-7-14	360 minutes	0.74 inches	168 hours	unknown	unknown

7. Provide a description of the method of flow measurement or estimate.

Undetermined

**VII. Discharge information (Continued from page 3 of Form 2F)**

005

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<5.6 mg/L	N/A			1	T-Hangar and Apron Area
Biological Oxygen Demand (BOD5)	5.57 mg/L				1	
Chemical Oxygen Demand (COD)	87.0 mg/L				1	
Total Suspended Solids (TSS)	24.3 mg/L				1	Wind Blown and upstream erosion
Total Nitrogen	5.43 mg/L				1	
Total Phosphorus	<0.10 mg/L				1	
pH	Minimum	Maximum 6.5	Minimum	Maximum	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

[illegible]

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
4-7-14	360 minutes	0.74inches	168 hours	unknown	unknown

7. Provide a description of the method of flow measurement or estimate.

Undetermined

**Jennings Laboratories**

1118 CYPRESS AVENUE  
VIRGINIA BEACH, VA 23451  
TELEPHONE 757/425/1498  
FACSIMILE 757/422/9176

Jennings Laboratories Certification Numbers  
VELAP:460199-Meeting NELAC Standards  
Virginia Drinking Water Certification ID: 00180

**Certificate of Analysis**

TO TALBERT & BRIGHT  
ATTN: STEVE PETERSON  
10105 KRAUSE RD. SUITE 100  
CHESTERFIELD, VA 23832

DATE 04/23/14  
Report #: R0414-161

## SAMPLE DESCRIPTION

Storm Water  
Sample received: 04/07/14 @ 1425  
Sample collected: 04/07/14 @ See Below  
Sample location: Chesapeake Regional Airport  
2800 Airport Dr.  
Chesapeake, VA  
Sample marked: See Below  
Sampled by: T. Hamilton - J.L.I.

## ANALYSIS NUMBER

See Below  
page 1 of 2  
MH

LAB #	14-0830	14-0831	14-0832	14-0833	14-0834
Time Collected:	1142	1155	1222	1202	1210
<u>ANALYSIS</u>	<u>Outfall #1</u>	<u>Outfall #2</u>	<u>Outfall #3</u>	<u>Outfall #5</u>	<u>Outfall #4</u>
pH	6.86	6.5	5.0	6.5	6.8
Oil & Grease	<7.1 mg/L	<6.2 mg/L	<6.2 mg/L	<5.6 mg/L	<5.6 mg/L
COD	96.0 mg/L	84.0 mg/L	50.0 mg/L	87.0 mg/L	70.0 mg/L
BOD <sub>5</sub>	8.17 mg/L	19.7 mg/L	6.91 mg/L	5.57 mg/L	4.13 mg/L
Total Suspended Solids	26.4 mg/L	52.0 mg/L	34.0 mg/L	24.3 mg/L	25.2 mg/L
Nitrite	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L	<0.01 mg/L
TKN	9.23 mg/L	2.46 mg/L	<1.0 mg/L	5.43 mg/L	4.34 mg/L
Nitrate	<0.10 mg/L	<0.10 mg/L	<0.10 mg/L	<0.10 mg/L	<0.10 mg/L
Total Phosphorus	0.18 mg/L	<0.10 mg/L	<0.10 mg/L	<0.10 mg/L	0.10 mg/L
Ammonia	<1.0 mg/L	<1.0 mg/L	<1.0 mg/L	<1.0 mg/L	<1.0 mg/L

These analytical results are based upon samples that were received by Jennings Laboratories, Inc. and are for your exclusive use only. This report may not be reproduced, except in full, without written approval from Jennings Laboratories, Inc.

Chemist

W. H. Jennings, Jr.

President

**Jennings Laboratories**

1118 CYPRESS AVENUE  
VIRGINIA BEACH, VA 23451  
TELEPHONE 757/425/1498  
FACSIMILE 757/422/9176

Jennings Laboratories Certification Numbers  
VELAP:460199-Meeting NELAC Standards  
Virginia Drinking Water Certification ID: 00180

**Certificate of Analysis**

TO TALBERT & BRIGHT  
ATTN: STEVE PETERSON  
10105 KRAUSE RD. SUITE 100  
CHESTERFIELD, VA 23832

DATE 04/23/14  
Report #: R0414-161

## SAMPLE DESCRIPTION

Storm Water  
Sample received: 04/07/14 @ 1425  
Sample location: Chesapeake Regional Airport  
2800 Airport Dr.  
Chesapeake, VA  
Sampled by: T. Hamilton - J.L.I.

## ANALYSIS NUMBER

See Below  
page 2 of 2  
MH

<u>ANALYSIS</u>	<u>METHOD</u>	<u>DATE &amp; TIME OF ANALYSIS</u>	<u>ANALYST</u>
pH	4500 H <sup>+</sup> B-2000	04/07/14 @ 1150; 1200; 1230; 1204; 1215	TH
Oil & Grease	1664A	04/15/14 @ 0047; 0102; 0105; 0102; 0103	*ESC / MTJ
COD	410.4	04/14/14 @ 1431	*ESC / DJD
BOD <sub>5</sub>	SM5210B-2011	04/08/14 @ 1400	HH
TSS	SM2540D-2011	04/09/14 @ 1538	LS
Nitrite	SM4500NH <sub>3</sub> D-2011	04/09/14 @ 0930	LS
TKN	SM4500NH <sub>3</sub> D-2011	04/22/13 @ 1545	HH
Nitrate	EPA 352.1-1971	04/10/14 @ 1000	LS
Total Phosphorus	SM4500PE-2011	04/15/14 @ 0845	LS
Ammonia	SM4500NH <sub>3</sub> D-2011	04/22/14 @ 1330	HH

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President



**Jennings Laboratories**

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Virginia Beach, VA 23451  
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**INVOICE**

TALBERT & BRIGHT  
ATTN: STEVE PETERSON  
10105 KRAUSE RD. SUITE 100  
CHESTERFIELD, VA 23832

INVOICE NUMBER	INVOICE DATE	P. O. NUMBER	TERMS	DUE DATE
14-0490	04/23/14		NET 30 DAYS	05/23/14
DESCRIPTION			PRICE	AMOUNT
Sampling and Analysis of Storm Water for pH, Oil & Grease, COD, BOD, TSS, Nitrite, TKN, Nitrate, Total Phosphorus and Ammonia.				
Sample received: 04/07/14				
Sample location: Chesapeake Regional Airport 2800 Airport Dr. Chesapeake, VA				
LAB #14-0830	Sample marked: Outfall #1			
LAB #14-0831	Sample marked: Outfall #2			
LAB #14-0832	Sample marked: Outfall #3			
LAB #14-0833	Sample marked: Outfall #5			
LAB #14-0834	Sample marked: Outfall #4			
Cost of Analysis:			5@ 535.00	\$2,675.00
Cost of Sampling:			1@ 200.00	200.00
INVOICE TOTAL:				----- \$2,875.00
Thank you for doing business with Jennings Laboratories and have a nice day ☺				

A CHARGE OF 1-1/2% PER MONTH WILL BE APPLIED TO ALL BALANCES OVER 30 DAYS. IN THE EVENT OF NON-PAYMENT, REASONABLE ATTORNEY'S FEES OF 25% WILL BE ADDED.